

PATENT COOPERATION TREATY

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NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
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ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 11 May 2000 (11.05.00)	
International application No. PCT/US99/06126	Applicant's or agent's file reference 32643.0216
International filing date (day/month/year) 26 March 1999 (26.03.99)	Priority date (day/month/year) 27 March 1998 (27.03.98)
Applicant AANNESTAD, Bjorn et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

15 October 1999 (15.10.99)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer C. Villet Telephone No.: (41-22) 338.83.38
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PATENT COOPERATION TREATY

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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 32643.0216	<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> FOR FURTHER ACTION </div> <div style="width: 60%;"> <i>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</i> </div> </div>	
International application No. PCT/US99/06126	International filing date (<i>day/month/year</i>) 26 MARCH 1999	(Earliest) Priority Date (<i>day/month/year</i>) 27 MARCH 1998
Applicant INFOMAGE INCORPORATED		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (See Box I).

2. ☐ Unity of invention is lacking (See Box II).

3. ☐ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing

☐ filed with the international application.
☐ furnished by the applicant separately from the international application,

☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.

☐ transcribed by this Authority.

4. With regard to the title,

☒ the text is approved as submitted by the applicant.
☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.
☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is:
 Figure No. 1

☐ as suggested by the applicant.

☐ None of the figures.

☒ because the applicant failed to suggest a figure.
☐ because this figure better characterizes the invention.

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The technical features mentioned in the abstract do not include a reference sign between parentheses (PCT Rule 8.1(d)).

NEW ABSTRACT

Methods and apparatus are provided for developing object-oriented network groupware applications (108) in substantially non object-oriented programming environments. Object-oriented architectural and naming standards are used in conjunction with object repositories (104), an application builder (106), an application analyzer (114), a code fragment library (110), and development standards in order to create modular code, thereby addressing limitations of the prior art.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/06126

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : G06F 15/20

US CL : 395/705, 703, 702

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 395/705, 703, 702; 709/303; 707/103

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS, OOPSLA, IEEE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,325,533 A (MCINERNEY et al) 28 June 1994, col.1, lines 6-23; col. 2, line 66 - col. 5, line 49; col. 9, lines 25-40; col. 12, line 44 - col. 13, line 51; col. 16, lines 24-66; col. 22, lines 19-41; col. 25, lines 26-40.	1-2, 5-7, 8-11, 14-16
Y	US 5,542,078 A (MARTEL et al) 30 July 1996, col. 3, line 35 - col. 4, line 10; col. 58, lines 32-35; figures 2, 6.	1-2, 5-7, 8-11, 14-16
Y	US 5,509,116 A (HIRAGA et al) 16 April 1996, figures 14, 15.	3-4, 12-13
Y	US 5,497,491 A (MITCHELL et al) 05 March 1996, figures 5, 8B, 9; col. 2, lines 26-48.	3-4, 12-13

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents.	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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O document referring to an oral disclosure, use, exhibition or other means	
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Date of the actual completion of the international search

09 JUNE 1999

Date of mailing of the international search report

20 AUG 1999

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/06126

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,446,902 A (ISLAM) 29 August 1995, col. 3, lines 26-44	1-16

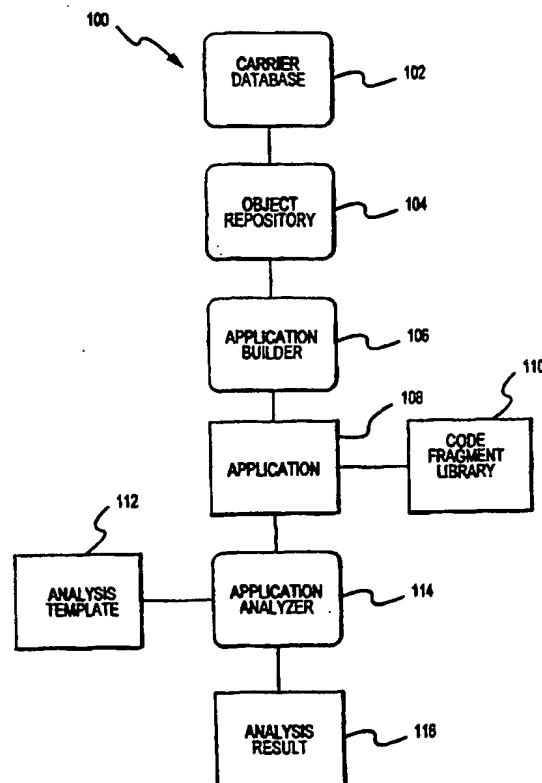
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International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G06F 15/20	A1	(11) International Publication Number: WO 99/50756 (43) International Publication Date: 7 October 1999 (07.10.99)
(21) International Application Number: PCT/US99/06126 (22) International Filing Date: 26 March 1999 (26.03.99) (30) Priority Data: 60/079,611 27 March 1998 (27.03.98) US (71) Applicant (for all designated States except US): INFOIMAGE INCORPORATED [US/US]; Suite 2310, 100 West Clarendon, Phoenix, AZ 85013 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): AANNESTAD, Bjorn [US/US]; 228 East Fremont, Tempe, AZ 85282 (US). STACK, John [US/US]; 740 West Coronado, Phoenix, AZ 85007 (US). (74) Agent: POTE, Daniel, R.; Snell & Wilmer L.L.P., One Arizona Center, 400 East Van Buren, Phoenix, AZ 85004-0001 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>

(54) Title: METHODS AND APPARATUS FOR NETWORK APPLICATIONS USING OBJECT TOOLS**(57) Abstract**

Methods and apparatus are provided for developing object-oriented network groupware applications (108) in substantially non object-oriented programming environments. Object-oriented architectural and naming standards are used in conjunction with object repositories (104), an application builder (106), an application analyzer (114), a code fragment library (110), and development standards in order to create modular code, thereby addressing limitations of the prior art.



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